



PATENT ABSTRACTS OF JAPAN

(11) Publication number: 2004066259 A

(43) Date of publication of application: 04.03.04

(51) Int. Cl

B21D 28/24
B21D 28/00
B21D 53/84
F01L 1/18

(21) Application number: 2002225170

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(22) Date of filing: 01.08.02

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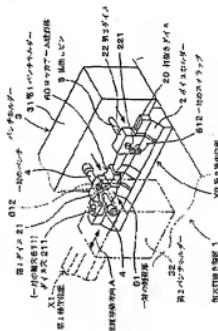
(54) DEVICE FOR PUNCHING SHAFT HOLE IN
ROCKER ARM

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a device for punching a shaft hole in a rocker arm for improving the productivity.

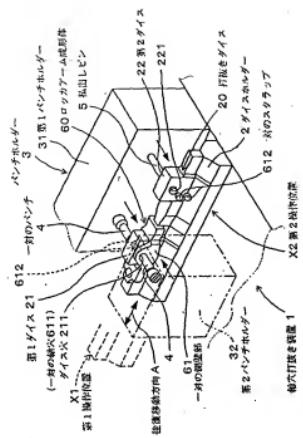
SOLUTION: A shaft hole punching device 1 of a rocker arm 6 comprises a die holder 2 having a first die 21 and a second die 22 and a punch holder 3 in which a pair of punches 4 to punch a pair of shaft holes 611 and a clearing pin 5 to clear a pair of scraps 612 from die holes 211 and 221 are disposed in an advancing/retracting manner. The die holder 2 is reciprocated with respect to the punch holder 3 between a first operational position X1 and a second operational position X2. At the operational positions X1 and X2, the pair of shaft holes 611 are punched in a rocker arm forming body 60 by the pair of punches 4 at one operational position, and the previously discharged pair of scraps 612 are cleared by the clearing pin 5.

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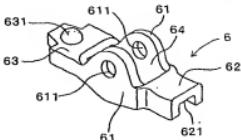
[图 1]

《圖 1》



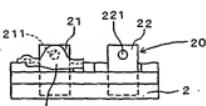
【图2】

(圖 2)



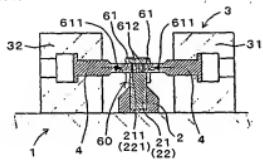
〔圖 3〕

(四三)



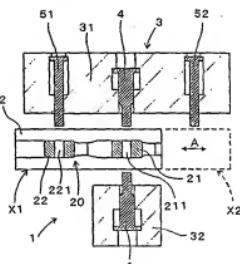
[図4]

(图4)



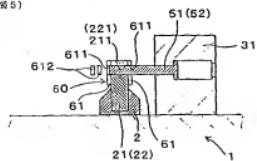
〔图6〕

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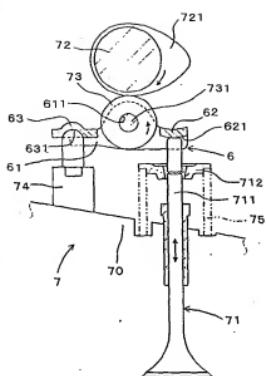
[図5]

Ques 5)



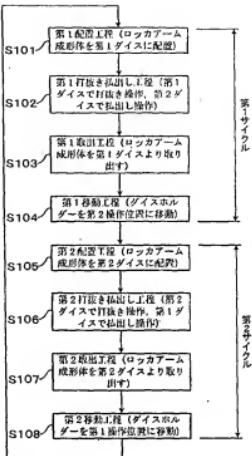
【図7】

(図7)



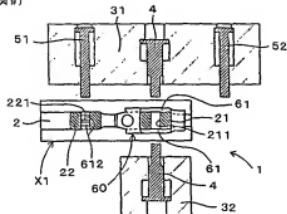
【図8】

(図8)



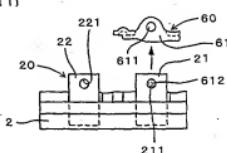
【図9】

(図9)



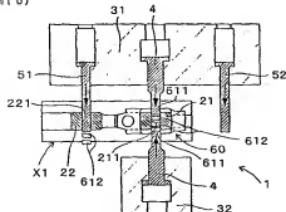
【図11】

(図11)



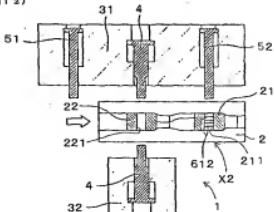
【図10】

(図10)

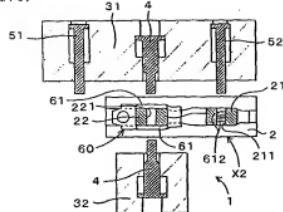


【図12】

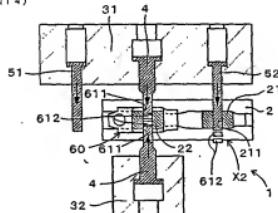
(図12)



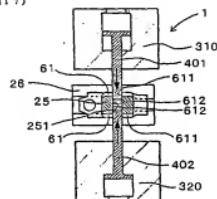
【圖 1-3】
(圖 1-3)



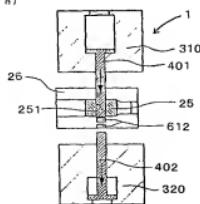
【圖 1-4】
(圖 1-4)



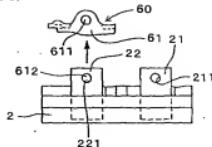
【図17】



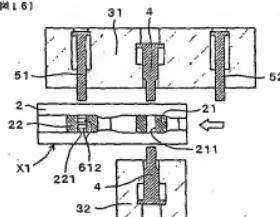
【圖 1-8】



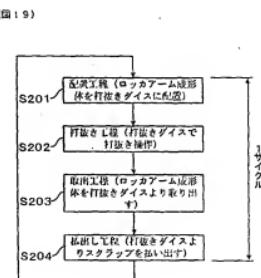
【图 15】
(图 15)



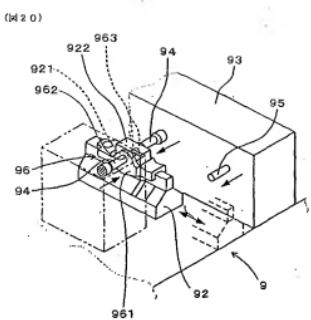
【图 1-6】



【四 19】



【图20】



【図21】

(图2-1)

